

## Descriptions of two new species closely related to *Psilalcis subfasciata* (Warren) (Geometridae, Ennominae) from the Philippines

Rikio SATO

2-27-29, Shindori-nishi, Niigata, 950-2036 Japan

**Abstract** *Psilalcis bani* and *P. luzonica* are described as new species from the Philippines, which are closely related to *P. subfasciata* (Warren).

**Key words** *Psilalcis*, Geometridae, new species, Philippines.

*Psilalcis subfasciata* (Warren) was described based on one male from Penang in Malaysia as a member of the genus *Gasterocome* Warren. Holloway (1993) transferred *subfasciata* to the genus *Psilalcis* Warren, and at the same time described its close relative, *calcicola*, as new to science, from Borneo. Both species share possession of “a pair of slightly corematous patches of hairlike setae on the basal sternite (1+2) of the male abdomen, just posterior to the tympanic cavi” (Holloway, 1993: 236). This characteristic is identical with blackish and submetallic “double tuft of hair beneath on the basal segment of abdomen” in the original description of *subfasciata* by Warren (1899). Recently, from the Philippines, I found two new species, apparently close relatives of both species. The species of the *subfasciata*-complex are very similar in colour and pattern of wings to one another, their genitalia providing the most reliable means of determination.

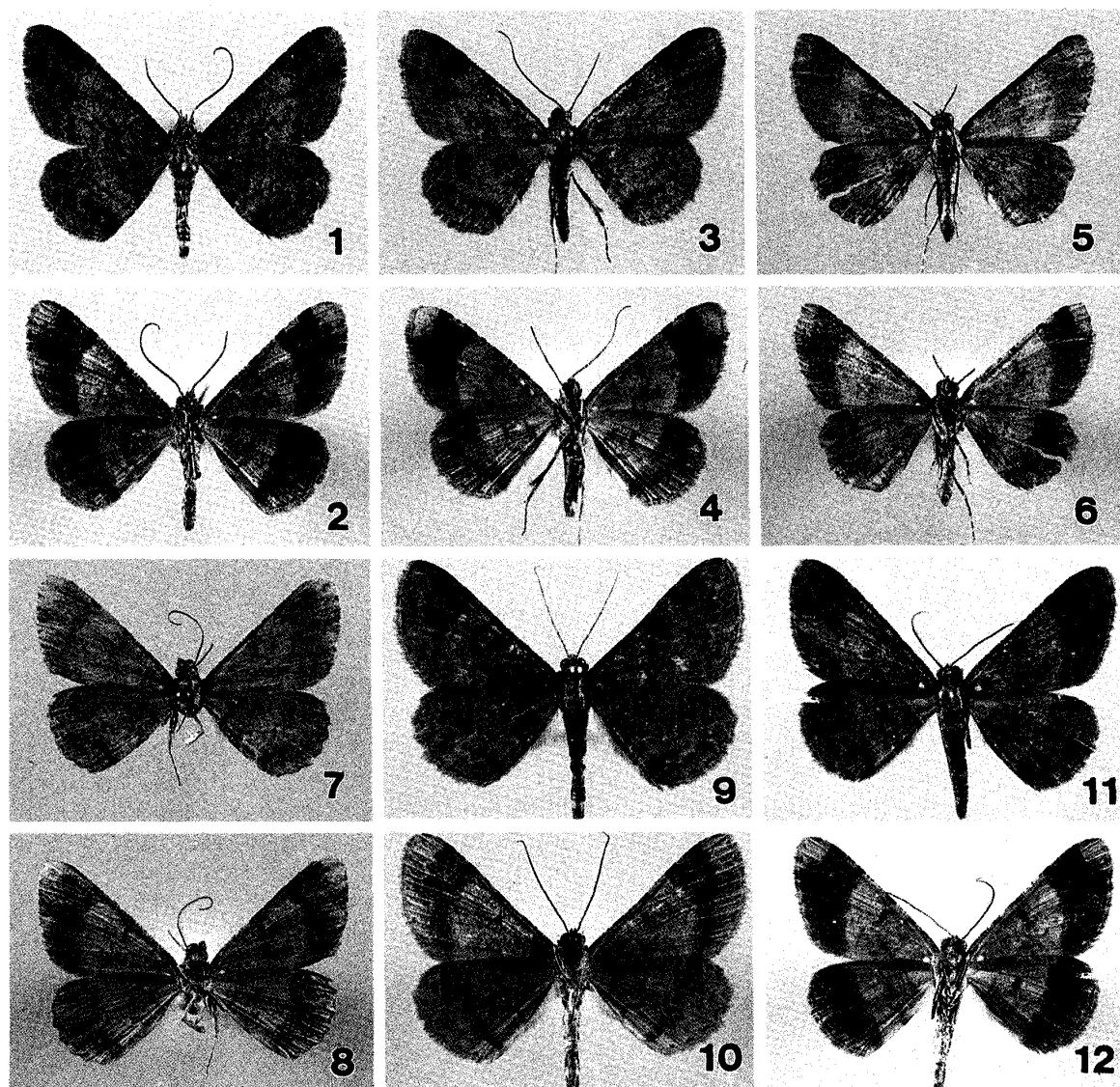
The following abbreviations are used to indicate the location of specimens. BMNH: The Natural History Museum, formerly the British Museum (Natural History), London. BMH: Bishop Museum, Honolulu. NSMT: National Science Museum, Tokyo. ZFMK: Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn. ZMC: Zoological Museum, Copenhagen, Denmark. RS: R. Sato collection, Niigata.

### *Psilalcis bani* sp. nov. (Figs 1–6)

Male. Length of forewing. 16–17 mm. More similar to *calcicola* (Figs 11–12) than to *subfasciata* (Figs 9–10) in colour of wings, being dark brown, without ochreous tone. A little lighter in wing colour than *calcicola*, but markings indistinguishable. Female unknown.

Male genitalia (Figs 16–18). Basic pattern identical with that of *subfasciata* (Fig. 13), but distinct from them. Uncus shorter; socius triangular; tegumen slenderer. Cucullus more elongate with a short process ventrally; a spine-like process producing ventrad from costa; the apex of sacculus as in *subfasciata*, but terminal process shorter. Juxta projecting medio-apical. Aedeagus with a blade-like process apically instead of a horn-like projection in *subfasciata*; a small triangular cornutus on vesica. Two specimens from Palawan are a little different from those of the other islands as follows (Fig. 18): cucullus slenderer with a longer ventral process; a ventral process from costa much reduced; a single cornutus round rather than triangular; the pair of slightly corematous patches of hairlike setae on the abdomen less developed.

Holotype. ♂, Philippines, Negros I., Mt Canlaon 850 m, 29. iv. 1997 (B. Tanaka), NSMT.

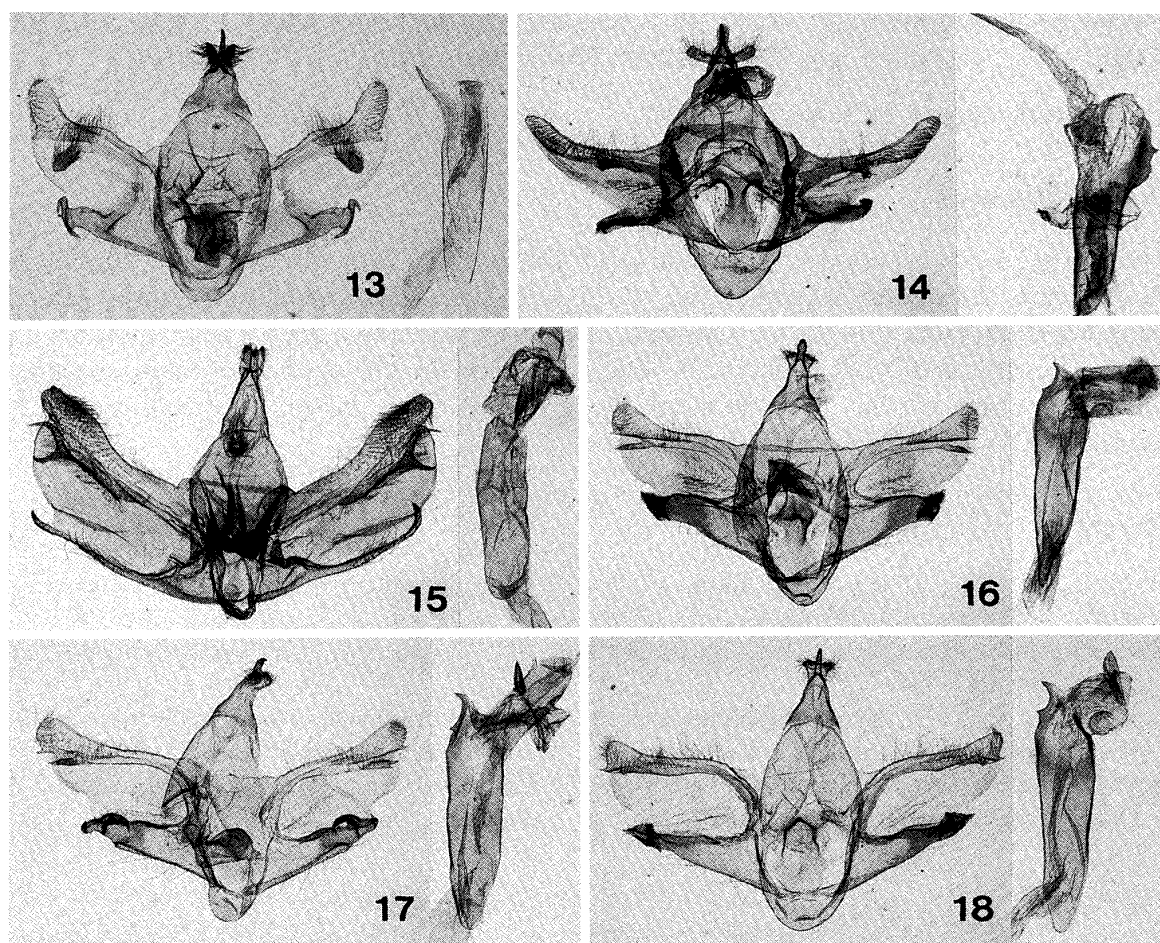


Figs 1-12. *Psilalcis* spp. Males. 1-6. *P. bani* sp. nov. 1-2: Negros, holotype; 3-4: Mindanao, paratype; 5-6: Palawan, paratype. 7-8. *P. luzonica* sp. nov., holotype. Luzon. 9-10. *P. subfasciata* (Warren). Sumatra. 11-12. *P. calcicola* Holloway. Borneo. (2, 4, 6, 8, 10, 12: underside).

Paratypes. 5 ♂, Negros I., Mt Canlaon, x. 1995 (native collector); 1 ♂, Mindanao I., S. Kotabato, Mt Matutum (native collector), NSMT & RS. 1 ♂, Luzon I., "Bolog, 14 km SE Lagawe, Prov. Ifugao, 16°41' n. Br., 121°10' ö. L., Sekundärvegetation, 500 m, 7. ii. 1988" (K. Cerny & A. Schintlmeister); 1 ♂, Luzon I., "Tanawan, 14 km S Real, Prov. Quezon, 14°34' n. Br., 121°33' ö. L., sekundärer Mittelgebirgswald, 600 m, 23. i. 1988" (K. Cerny & A. Schintlmeister), ZFMK. 1 ♂, Palawan I., Manitalingajan, Pinigisan 600 m, 4. ix. 1961, Noona Dan Exp. 61-62, ZMC; 1 ♂, Palawan I., "S. Vicente, 20 km NEE Roxas, 10°21' n. Br., 119°10' ö. L., Mittelgebirgsurwald, 400 m, 12-17. i. 1988" (K. Cerny & A. Schintlmeister), ZFMK.

Geographical range. Philippines (Luzon, Mindanao, Negros, Palawan).

Remarks. Palawan population will be treated as a subspecies in future, when further material becomes available. Two paratypes from Luzon and one paratype from Palawan



Figs 13–18. Male genitalia of *Psilalcis* spp. 13. *P. subfasciata* (Warren). Sumatra. RS-2652. 14. *P. luzonica* sp. nov. Luzon. RS-5050. 15. *P. calcicola* Holloway. Borneo. RS-5072. 16. *P. bani* sp. nov. Negros. RS-5139. 17. *Ditto*. Mindanao. RS-5053. 18. *Ditto*. Palawan. RS-5049.

were taken during the collecting expeditions to the Philippines in 1988 by Dr A. Schintlmeister, whose accounts were given by him (Schintlmeister, 1993). One paratype from Palawan was supplied by the Danish Noona Dan Expedition in 1961 and 1962, whose details were given by Petersen (1966).

The specific name is dedicated to Mr Ban Tanaka, who took and donated to me the holotype of this species.

***Psilalcis luzonica* sp. nov.** (Figs 7–8).

**Male.** Length of forewing. 16 mm. Very similar to the preceding species in appearance, but tinged with ochreous. Female unknown.

**Male genitalia** (Fig. 14). Many differences from those of the other congeners. A pair of oblong transverse socius. Cucullus more elongate, not projecting ventrally, with a small hairy ventral process from costa; the apex of sacculus terminating in a small dentate process. Juxta concave medially with sclerotized ridges on both sides. Aedeagus sclerotized apically with a small process, armed with a horn-like cornutus on vesica.

Holotype. ♂, "Philippines, Ifugao Province, Jacmal Bunhian, 24 km E. Mayoyao, 800–1,000 m, 11–13. v. 1967, Light Trap" (H. M. Torrevillas), BMN.

Geographical range. Philippines (Luzon).

### Acknowledgements

I would like to express my deep gratitude to Dr D. Stüning, Zoologisches Forschungsinstitut und Museum Alexander Koeng, Bonn, Dr S. E. Miller, Department of Natural Science, Bishop Museum, Honolulu, Dr O. Karsholt, Zoologisk Museum, Copenhagen, Dr A. Schintlmeister, Dresden, and Mr B. Tanaka, Toyota, Japan, for the gift or loan of many specimens used in the present paper. I deeply thank Dr H. Inoue, Iruma, Japan, who read through the manuscript and gave me valuable suggestions.

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### 摘 要

*Psilalcis subfasciata* (Warren) (シャクガ科エダシャク亜科) に近縁のフィリピン産の2新種 (佐藤力夫)

Malaysia から Borneo, Sumatra に分布する *Psilalcis subfasciata* (Warren) に近似の2新種を Philippines から記載した。現在 *Psilalcis* 属には、互いにやや異質ないくつかのまとまった種群が含まれており、将来属の再検討が必要と思われるが、この2新種と *subfasciata*、それに Borneo から近年記載された *P. calcicola* Holloway の4種は明らかに近縁である。外観は互いによく似ているが、♂交尾器の形態は明確に異なっている。

*P. bani* Sato (Luzon, Mindanao, Negros, Palawan)

*P. luzonica* Sato (Luzon).

(Accepted November 12, 1997)